

### REMARKS

The Office Action rejected certain claims under 35 U.S.C. §§ 102 and 103, indicated other claims as being allowable and allowed the remaining claims. Applicants amended the specification. Applicants made no changes to the claims. Claims 1, 3-14, 16-27 and 29-62 are pending. Applicants request that the Examiner reconsider and withdraw the rejections and objections. A Request for Continued Examination and a Petition for a three (3) month extension of time accompany this Amendment as separate papers.

### **Examiner's Response to Arguments**

In the Response to Arguments section of the Office Action, the Examiner stated that "Applicant has not argued the Examiner's reading of the claimed fillet extending a distance from the airfoil and a maximum distance located in the enlarged section is not the suction side and is adjacent to a stagnation line, extends to a maximum height from the wall in the enlarged section and on the suction side of the airfoil, or enlarged section profile on" United States Patent Number 6,419,446 to Kvasnak *et al.* ("Kvasnak"). The Examiner then concludes that "Applicant has acquiesced on these elements." The Examiner is mistaken.

In the prior Amendment, Applicants successfully argued that Kvasnak failed to disclose or to suggest all of the features in independent claims 1, 14 and 27, in particular that the enlarged section ends adjacent the gage points. The Examiner found this argument persuasive and withdrew the rejection. Applicants did not need to address features appearing in dependent claims, since the rejection of the independent claims was improper. Applicants remind the Examiner that dependent claims include all of the features of the independent claims from which they depend. *See* 37 CFR § 1.75.

Furthermore, Applicants did address the fact that Kvasnak did not disclose or suggest these features. In the prior Amendment, Applicant stated that the newly added claims "define inventions that are patentable over the cited references." This statement includes Kvasnak. For these reasons, the Examiner's statement was incorrect and should be withdrawn.

### **Claim Rejections - 35 U.S.C. § 102**

The Office Action rejected claims 29, 30 and 35 under 35 U.S.C. § 102 as being anticipated by Kvasnak. Applicants assert that the rejection was improper and must be withdrawn. Specifically, Applicants believe that Kvasnak fails to disclose or to suggest all of the claimed features.

Independent claim 29 recites, *inter alia*, that the maximum distance or maximum height is "offset" from the stagnation line. Kvasnak fails to disclose or to suggest such a feature. Figure 3 and column 4, lines 19-65, describe that the major and minor axes (*i.e.* the points of maximum distance) of the fillet reside on the dividing plane 56 and that the dividing plane 56 is "aligned with a stagnation line." Likewise, Figure 2 shows that the maximum height of the fillet also aligns with the stagnation line. None of the remaining cited references provide a motivation for such a modification. In fact, any such modification would appear to teach away from Kvasnak. Kvasnak states that the "relative positioning" of the fillet "provides an appreciable performance advantage." (Kvasnak, col. 4, ll. 62-64). Applicants request that the Examiner reconsider and withdraw the rejection.

### **Claim Rejections - 35 U.S.C. § 103**

The Office Action rejected claims 51, 53, 54, 56, 57 and 60-62 as being unpatentable over Kvasnak. Applicants assert that the rejection was improper and must be withdrawn. Specifically, Applicants believe that the Examiner failed to establish a *prima facie* case of obviousness.

One criterion of a *prima facie* case of obviousness requires that a motivation or suggestion exist to modify the reference. The Office Action states that Kvasnak fails to disclose the particular profile of the enlarged section of the fillet (*i.e.* "variable curvature without any slope discontinuities"). The Office Action then states that it would have been "an obvious matter of design choice" to modify Kvasnak to such particular profile. Courts routinely reverse obviousness rejections relying on design choice for a motivation. *See, e.g., In re Chu*, 66 F.3d 292 (Fed. Cir. 1995).

The Office Action states that "applicant has not disclosed that having an enlarged section having a profile of the specific shape solves any stated problem or is for any particular purpose." As succinctly stated by the Federal Circuit in *In re Chu* "[t]o require [patent applicants] to include evidence and arguments in the specification regarding whether [a feature] was a matter of 'design choice' would be to require patent applicants to divine the rejections the PTO will proffer when the patent applications are filed." *Id* at 298.

In addition, the modification proposed by the Examiner would not appear to improve flow characteristics, and appears to be impermissible hindsight. As seen in Figure 2 of Kvasnak, the slope discontinuity occurs at the stagnation line. At a stagnation line, fluid particles have zero velocity. Modifying the shape of the fillet at the stagnation point as proposed by the Examiner would not improve flow (the flow would remain at zero velocity). None of the remaining cited references overcome the shortcomings of Kvasnak. Applicants request that the Examiner reconsider and withdraw the rejection.

### **Allowable Subject Matter**

The Office Action objected to claims 31-34, 52, 55 and 59, but indicated that the claims would be allowable if rewritten in independent form. Applicants thank the Examiner for this indication. As discussed above, the rejection of the independent claim from which these claims depend was improper and must be withdrawn. Accordingly, the objection of these dependent claims should also be withdrawn. Applicants request the Examiner reconsider and withdraw the objection.

### **Allowed Claims**

The Office Action stated that claims 1, 3-14, 16-27 and 36-50 were allowed. Applicants did not amend these claims.

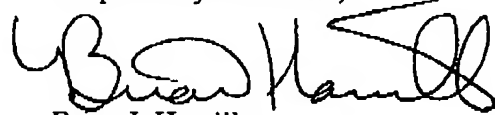
### **Amendment to Specification**

Applicants modified paragraph 32 of the specification to correct a grammatical error. The inclusion of a period (".") into paragraph 32 clearly does not introduce new matter.

### Conclusion

In light of the foregoing, Applicant submits that the claims are now in condition for allowance. Applicant requests that the Examiner reconsider and withdraw the rejections and objections. Applicants solicit the allowance of claims 1, 3-14, 16-27 and 29-62 at an early date.

Respectfully submitted,

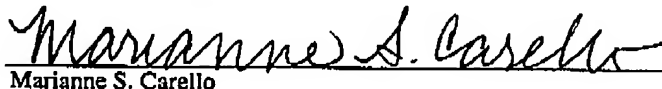


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